

**CLAIMS**

1. A radiation detector with a main body, the  
main body comprising

5 a radiation detecting portion for detecting a  
radiation intensity,

a sound output portion for outputting a sound  
according to a radiation intensity detected by the  
radiation detecting portion, and

10 a power supply portion for supplying power at  
least to the radiation detecting portion and the sound  
output portion, wherein

the sound output portion is configured to be  
detachable from the main body.

15 2. A radiation detector with a main body, the  
main body comprising

a radiation detecting portion for detecting a  
radiation intensity,

a power supply portion for supplying power at  
least to the radiation detecting portion, and

20 a power supply switch portion for turning on/off  
the power supply portion, wherein

the power supply switch portion is configured to  
be detachable from the main body.

25 3. A radiation detector with a main body, the  
main body comprising

a radiation detecting portion for detecting a

radiation intensity, and

an integrated component having integrally a power supply portion including a battery for supplying power at least to the radiation detecting portion and a power supply switch portion for turning on/off the power supply portion, wherein

the integrated component is configured to be detachable from the main body.

4. A radiation detector with a main body, the main body comprising

a radiation detecting portion for detecting a radiation intensity,

a detection sensitivity variable portion for varying a detection sensitivity of the radiation detecting portion, and

a display variable portion for varying at least one of a sound display and an image display of a radiation intensity detected by the radiation detecting portion, wherein

the detection sensitivity variable portion and the display variable portion are configured to be detachable from the main body.

5. The radiation detector according to any one of Claims 1 to 4, wherein

the sound output portion, the power supply switch portion, the integrated component of the power supply

portion and the power supply switch portion, or the detection sensitivity variable portion and the display variable portion includes a connection connector to be detachably connected to a connection connector of the main body, and is configured to be detachable from the main body via the connection connector.

6. The radiation detector according to any one of Claims 1 to 4, wherein

the sound output portion, the power supply switch portion, the integrated component of the power supply portion and the power supply switch portion, or the detection sensitivity variable portion and the display variable portion are detachably screwed to the main body.

7. The radiation detector according to any one of Claims 1 to 4, wherein

the sound output portion, the power supply switch portion, the integrated component of the power supply portion and the power supply switch portion, or the detection sensitivity variable portion and the display variable portion includes an engagement portion to detachably engage an engagement portion of the main body, and is configured to be detachable from the main body via the engagement portion.